

This article was submitted via e-mail by Eric Fry.

Mercury Madness?

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I'm glad to see this team take on mercury. It is astounding that EPA says officially that they have no scientific basis for linking power plant emissions with mercury in fish, but we're going to regulate coal anyway. Clear Skies too. Is science not even a consideration any more?

The reason they can't make a link between burning coal and mercury in fish is because the natural mercury cycle is enormous and extremely complex. Power plants may well make no difference at all. Sound familiar? It's the same scam as climate change. EPA is using the bogus "every little bit hurts" theory. It doesn't.

Just as with climate change, we need to understand the natural mercury system before we beat our selves up over it. My bet is the answer is the same for mercury as for climate -- we don't drive the system. I've looked at some of the numbers and they are very fishy. (Sorry, couldn't help the pun.)

David

Is EPA Ignoring the Science on Mercury?

Willie Soon and Robert Ferguson

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The EPA's recently announced "Clear Skies" initiative would cut mercury emissions by 69%, resulting in the first-ever national cap on such emissions. The EPA's primary target is U.S. coal-fired power plants.

However, emerging scientific research indicates that EPA's narrow prescription for new controls on U.S. coal will mean higher energy prices, more dependence on imported natural gas and lost jobs -- all to address a public harm that has not been found.

Once emitted, naturally occurring mercury enters our atmosphere as a gas, remaining there for about a year. It may travel far before falling to the surface. This airborne mercury poses no serious threat to human health.

What has provoked concern is methylmercury, which is derived from elemental mercury deposited in the earth's waters. Methylmercury is thought to enter the human food chain only after complex bio-processing through aquatic life, ending up in some of the fish we consume.

High levels of this form of mercury are thought to be particularly dangerous to fetuses and young children. However, there is significant scientific uncertainty about the nature and scope of mercury-related health risks.

The few epidemiological studies that have been conducted reached ambiguous conclusions. Recent findings by the Center for Disease Control show that the level of mercury found in humans is far below the threshold of health risk, even for sensitive populations. The EPA has admitted that it cannot determine how much, if any, of the mercury in fish comes from coal combustion, arguing that such a determination is unnecessary.

Beyond health concerns, scientific understanding of the global cycle of mercury suggests that the proposed regulation of U.S. coal power plants will do little to reduce worldwide mercury emissions and their deposition.

U.S. power plants emit only 1 percent or less of the world's total mercury emissions. About half of the world's total annual release comes from industrial activities, and the rest from natural sources - the ocean, volcanoes and wildfires. The ocean has naturally held about 100 million tons of mercury for millions of years.

U.S. power plants emitted about 50 metric tons of mercury into the atmosphere in 2000. By comparison, coal combustion in China emitted approximately 270 tons that year. Another study, limited to man-made mercury sources from fossil-fuel combustion in 1995, found that the United States is out-emitted not only by combined contributions of the top-seven European emitters, but also by China, India, Australia and Zaire individually. U.S. coal plant emissions represent about 2 months of emissions from China alone. Targeting relatively clean U.S. power plants would not achieve a meaningful reduction in annual global mercury emissions.

Mercury emissions from U.S. power plants dropped in the 1990s, plausibly as a byproduct of current scrubber technologies. The Energy Information Agency reported in October 2001 that no technology is available to make further significant cuts. EIA also noted that the very technological advances needed to lower mercury emission could be threatened by passage of technologically premature regulations.

Finally, emerging science on wildfires may point to ways to make deep cuts in worldwide mercury emissions that could yield multiple benefits. U.S. and Canadian researchers have estimated that worldwide burning of vegetation emits about 850 tons of mercury annually to the air. Independently, South African scientists found mercury emission from burning vegetation at 450 to 1200 tons annually. Reducing forest fires through better forest management may prove to be the most effective means of achieving significant reductions in mercury emissions. Annually forest fires alone completely dwarf emissions from U.S. power plants.

Reducing emissions from relatively clean U.S. power plants would not significantly lower the annual volume of mercury emissions. The EPA's "Clear Skies" initiative would undercut coal as an abundant, vital energy source at a time when the U.S. economy demands a predictable, affordable supply of domestic energy.

The Center for Science and Public Policy is a project of Frontiers of Freedom, a non-profit organization dedicated to restoring constitutional limits on the power and extent of government.

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"When many cures are offered for a disease, it means the disease is not curable" - Chekhov